

**Sarung tangan pelindung terhadap bahan kimia
berbahaya dan mikroorganisme – Bagian 5:
Terminologi dan persyaratan kinerja terhadap risiko
dari mikroorganisme**

(ISO 374-5:2016, IDT, Eng)

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Prakata

Standar Nasional Indonesia (SNI) ISO 374-5:2016, dengan judul *Sarung tangan pelindung terhadap bahan kimia berbahaya dan mikroorganisme – Bagian 5: Terminologi dan persyaratan kinerja terhadap risiko dari mikroorganisme (ISO 374-5:2016, IDT, Eng)*, merupakan hasil adopsi identik dari standar ISO 374-5:2016 *Protective gloves against dangerous chemicals and micro-organisms — Part 5: Terminology and performance requirements for micro-organisms risks*, dengan metode republikasi *reprint*, yang ditetapkan oleh BSN pada tahun 2020.

Standar ini disusun oleh Komite Teknis 13-09 Biosafety and Biosecurity dengan Badan Standardisasi Nasional (BSN) sebagai sekretariat Komite Teknis. Standar ini telah dibahas dalam rapat teknis, dan terakhir disepakati dalam rapat konsensus di Jakarta pada tanggal 17 April 2020 yang dihadiri oleh para pemangku kepentingan (*stakeholder*) terkait, yaitu perwakilan dari produsen, konsumen, pakar dan pemerintah, serta perwakilan dari lembaga penguji, asosiasi, perguruan tinggi, pakar serta instansi terkait.

Standar ini telah melalui tahap jajak pendapat pada tanggal 11 Mei 2020 sampai dengan 30 Mei 2020 dengan hasil akhir disetujui menjadi SNI.

Apabila di kemudian hari pengguna menemukan kesulitan dalam penggunaan standar ini, maka dianjurkan untuk merujuk pada standar aslinya yaitu ISO 374-5:2016 dan/atau dokumen terkait lain yang menyertainya.

Perlu diperhatikan bahwa kemungkinan beberapa unsur dari dokumen standar ini dapat berupa hak paten. Badan Standardisasi Nasional tidak bertanggungjawab untuk pengidentifikasian salah satu atau seluruh hak paten yang ada.

Sarung tangan pelindung terhadap bahan kimia berbahaya dan mikroorganisme – Bagian 5: Terminologi dan persyaratan kinerja terhadap risiko dari mikroorganisme

1 Scope

This part of ISO 374 specifies the requirements and test methods for protective gloves intended to protect the user against micro-organisms.

NOTE If other protection features is to be needed, e.g. chemical risks, mechanical risks, thermal risks, electrostatic dissipation etc., the appropriate specific performance standard is to be used in addition. Further information on protective gloves standards can be found in the EN 420.

2 Normative reference

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 374-2:2014, *Protective gloves against dangerous chemicals and micro-organisms — Part 2: Determination of resistance to penetration*

EN 420:2009, *Protective gloves — General requirements and test methods*

ISO 16604:2004, *Clothing for protection against contact with blood and body fluids — Determination of resistance of protective clothing materials to penetration by blood-borne pathogens — Test method using Phi-X 174 bacteriophage*

3 Term and definition

For the purposes of this document, the following terms and definitions apply.

3.1

protective gloves against micro-organisms

protective gloves which form a protective barrier to microbiological agents

Note 1 to entry Microbiological agents are bacteria or virus or fungi.

3.2

bacteria

very large group of micro-organisms comprising one of the three domains of living organisms, they are prokaryotic, unicellular, and either free-living in soil or water or parasites of plants or animals

3.3

virus

any of various simple sub-microscopic parasites of plants, animals, and bacteria that often cause disease and that consist essentially of a core of RNA or DNA surrounded by a protein coat

Note 1 to entry Unable to replicate without a host cell, viruses are typically not considered living organisms

3.4 fungi

any of numerous eukaryotic organisms of the kingdom Fungi, which lack chlorophyll and vascular tissue and range in form from a single cell to a body mass of branched filamentous hyphae that often produce specialized fruiting bodies

Note 1 to entry The kingdom includes the yeasts, moulds and smuts.

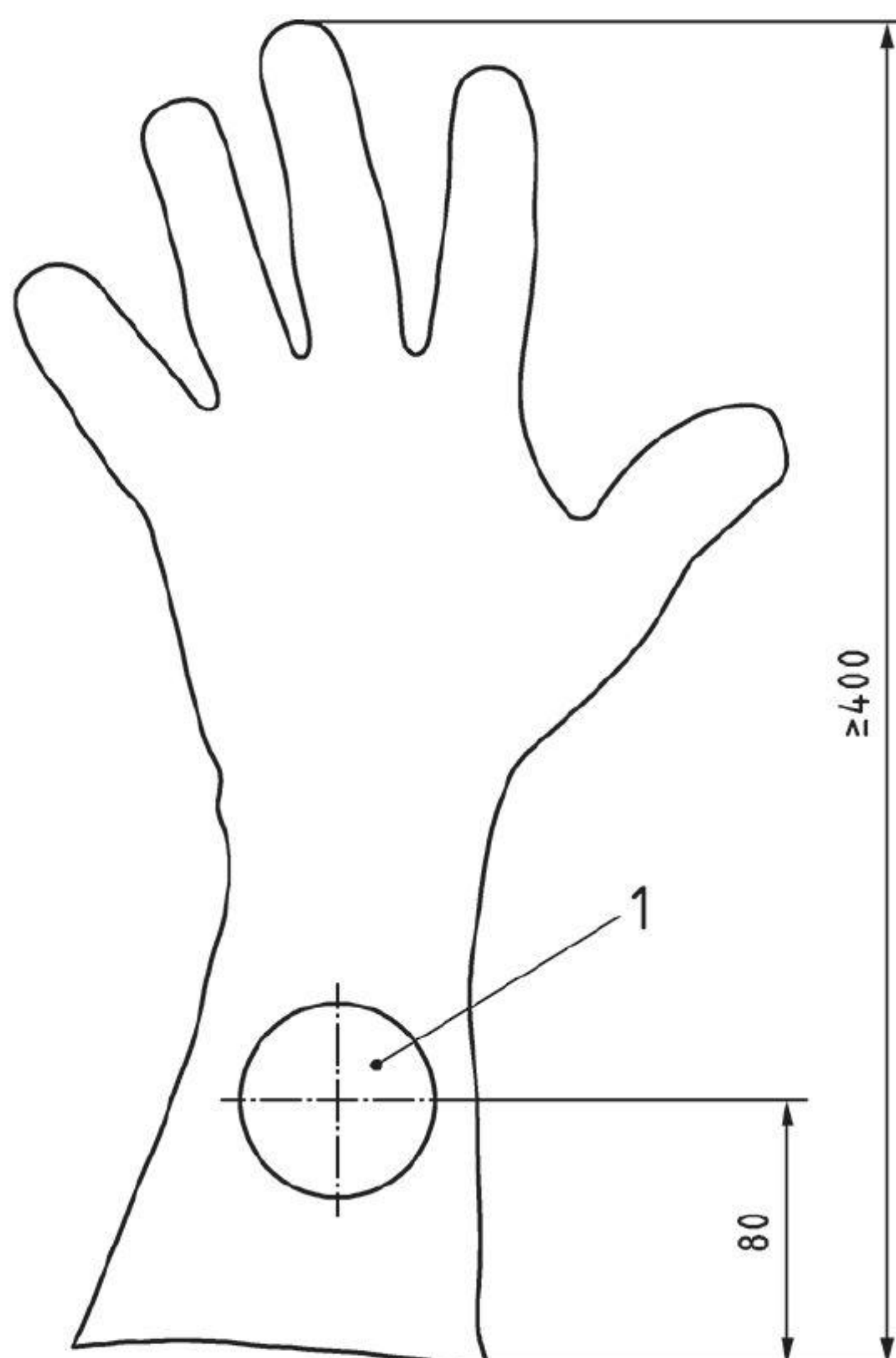
4 Sampling

4.1 Sampling for viral penetration testing

The test specimen shall be taken from the palm area. If the glove is longer than or equal to 400 mm and if the cuff is claimed to protect against micro-organism risks, additional test specimens shall be taken where the centre is 80 mm from the end of the cuff (see Figure 1). For further instructions, ISO 16604:2004, Clause 7.

In the case of seams in the hand area, this area shall be tested.

Dimensions in millimetres



Key
1 sample

Figure 1 — Additional sample location for gloves longer than 400 mm

4.2 Sampling for bacteria/fungi penetration testing

The sampling for bacteria/fungi penetration shall be according to EN 374-2:2014, Clause 5.

5 Performance requirement

5.1 General requirements

Protective gloves against micro-organism risks shall comply with the requirements given in EN 420:2009, Clause 4, Clause 5 and Clause 7.

5.2 Penetration

Protective gloves against virus, bacteria and fungi shall not leak when tested according to EN 374-2:2014, 7.2 and 7.3.

5.3 Protection against viruses

Protective gloves against virus shall be tested according to ISO 16604 Procedure B and shall exhibit no detectable transfer (<1 PFU/ml) of the Phi-X174 bacteriophage in the assay titre.

5.4 Requirements for different protection types of gloves

The requirements are mentioned in the Table 1.

Table 1 — Requirements for different protection types of gloves

	5.1	5.2	5.3
Glove protecting against bacteria and fungi	X	X	X
Glove protecting against virus, bacteria and fungi	X	X	
X = required			

6 Marking

6.1 General

Marking of protective gloves against micro-organisms shall be in accordance with the marking requirement for protective gloves in EN 420.

6.2 Marking of gloves protecting against bacteria and fungi

For gloves protecting against bacteria and fungi complying with the requirements stated in , the pictogram in 5.4Figure 2 shall be used with reference to this part of ISO 374.

ISO 374-5:2016



Figure 2 — Marking of Glove protecting against bacteria and fungi

6.3 Marking of gloves protecting against viruses, bacteria and fungi

For gloves protecting against viruses, bacteria and fungi complying with the requirements stated in 5.4, the pictogram in Figure 3 shall be used with reference to ISO 374

ISO 374-5:2016



VIRUS

Figure 3 — Marking of gloves protecting against viruses, bacteria and fungi

7 Information supplied by the manufacturer

The information supplied by the manufacturer shall be in accordance with the requirements for information as defined in EN 420. For protective gloves that are marked offering protection against micro-organisms and complying with the requirements in , this shall be stated in the user 5.4instructions.

The following warning shall be added that this information does not reflect the actual performance in the workplace: "The penetration resistance has been assessed under laboratory conditions and relates only to the tested specimen."

If not tested against viruses, the following warning shall be added: "Not tested against viruses".

Informasi pendukung terkait perumus standar

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